

Work Order ID 61371

Friday, August 20, 2010 3:47:31 PM



Page 1

Item ID: D3688-3

Accept



Setup Start



Revision ID:

Item Name: STUD

Stop



Start Date: 8/23/2010 Start Qty: 6.00



Cust Item ID:

Required Date: 8/30/2010 Req'd Qty: 6.00



Customer:

Reference:

Approvals: Process Plan: MF

Date: 10-8-20

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
100		0.00							
	BAND SAW								
Bandsaw	Memo	0.00							
Jeaspa Bandsaw	***DO NOT USE CHOP SAW***								
110		0.00							
	DOOSAN LATHE								
Doosan	Memo	0.00							
Doosan Lathe	1-Turn as per Folio FA717 Rev: <u>N/A</u> & Dwg D3688 Rev: <u>C</u> <input type="checkbox"/> 2-Deburr per dwg D3688 3-Check .625" bore with DT9530 GO/NO GO Gauge								
120	QC2- Inspect parts off machine FAI/FAIB	0.00							
	Memo	0.00							
QC									
Quality Control									

6 0
SL 10/08/20

6 0
SL 10/08/20

6 0
SL 10/08/20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 2

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Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130



Lathe Conv

CONVENTIONAL LATHE

0.00

Conventional Lathe

Memo

Face to finished length as per dwg D3688 AND center drill as per Dwg D3688

0.00

140



QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

0.00

Memo

0.00

150



Doosan

Doosan Lathe

DOOSAN LATHE

0.00

Memo

1- Turn as per Folio FA717 Rev: _____ & Dwg D3688 Rev: _____ 2-Deburr
per dwg D3688

0.00

N/A
Good 10-08-30

W/O:		WORK ORDER CHANGES					
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3688-3 PAR #: _____ Fault Category: Machinery NCR: Yes No DQA: */* Date: 10/09/14
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: _____ Date: _____

NCR: 61371		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10/09/02	180	One stud is missing. Cannot find it? W/O's marked 6, but only counted 5. R.C. LOA.	<i>/</i> <i>QSIU2</i>	Continue NDT for the remaining 5.	<i>M</i> 10/09/02	<i>/</i> <i>10/09/02</i>	<i>/</i> <i>QSIU2</i>	<i>/</i> <i>10/09/02</i>

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Friday, August 20, 2010 3:47:31 PM



Page 4

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Cust Item ID:

Required Date: 8/30/2010 Req'd Qty: 6.00



Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

Receive & Inspect for Damage & Mat'l Certs

0.00

CL 10/9/13 S



Packaging

Memo

0.00

Packaging

Ensure certificate of conformity is attached

200

QC5- Inspect part completeness to step on W/O

0.00

Sudarlog



QC

Quality Control

Memo

0.00

→ works ok or with working.

(X) _____

210

Identify as per dwg & Stock Location

D70

0.00



Packaging

Memo

0.00

10/9/13 S

W/O:		WORK ORDER CHANGES					
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Page 5

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Cust Item ID:

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Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run

Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

220



QC21- Final Inspection - Work Order Release

0.00

QC

Quality Control

Memo

0.00

10/9/14 HJ

10-9-13
5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Picklist Print

Friday, August 20, 2010 3:47:30 PM

Page 1

Work Order ID: 61371



Parent Item: D3688-3



Parent Item Name: STUD

Start Date: 8/23/2010

Required Date: 8/30/2010

Start Qty: 6.00

Required Qty: 6.00

Comments:

Rev:A New Issue 08-01-29 JLM Verified By:EC
IPP Rev:B Material Change 09-01-07 JLM Verified By:EC
IPP Rev:C Added note on Step 2 09-01-26 JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M174PH-H900R1.000 		Purchased	No			100	f	26.8000	0.788	4.976842 			

17-4SS H900 ROUND BAR 1.00

Location	Loc Qty	Loc Code
MAT030	26.8	
112570	26.8	

5.0 SL 10/08/20

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DART AEROSPACE LTD	Work Order:	61371
Description: Stud	Part Number:	D3688-3
Inspection Dwg: D3688 Rev: C		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

First Article Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.695	+/-0.010	.700	✓		NREN-SL-3	
0.625	+0.004/-0.000	.627	✓		"	
1.25	+0.000/-0.03	1.240	✓		"	
118°	0.5°	118°	✓			
R0.03	+/-0.030	.03	✓			
0.11 Ref	+/-0.030	.11	✓			
90°	0.5°	90°	✓			
Ø0.189	+0.005/-0.001	.189	✓		"	
1.31	+/-0.030	1.325	✓		"	
1.65	+/-0.030	1.645	✓		"	
0.870	+0.000/-0.010	.865	✓		"	
Ø0.659	+0.000/-0.015	.650	✓		"	
9.324	+/-0.015	9.322	✓		VRINCAL-02	
2.90	+/-0.030	2.900	✓		VRIN-X-3	
3/4-16UNF-2A	N/A		✓			
0.075 x 45°	+/-0.010 x 0.5°	.075X45°	✓		"	
0.370	+0.000/-0.010	.365	✓		"	
Ø0.189	+0.005/-0.001	.189	✓		"	
R0.25	+/-0.030	.250	✓		R-G	
R0.50	+/-0.030	.500	✓		R-G	

Measured by:	SL	Audited by:	H.A	Prototype Approval:	N/A
Date:	10/08/20	Date:	10/08/28	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	09.05.11	New Issue	KJ	
B	09.11.04	Dwg Rev updated	KJ	MM

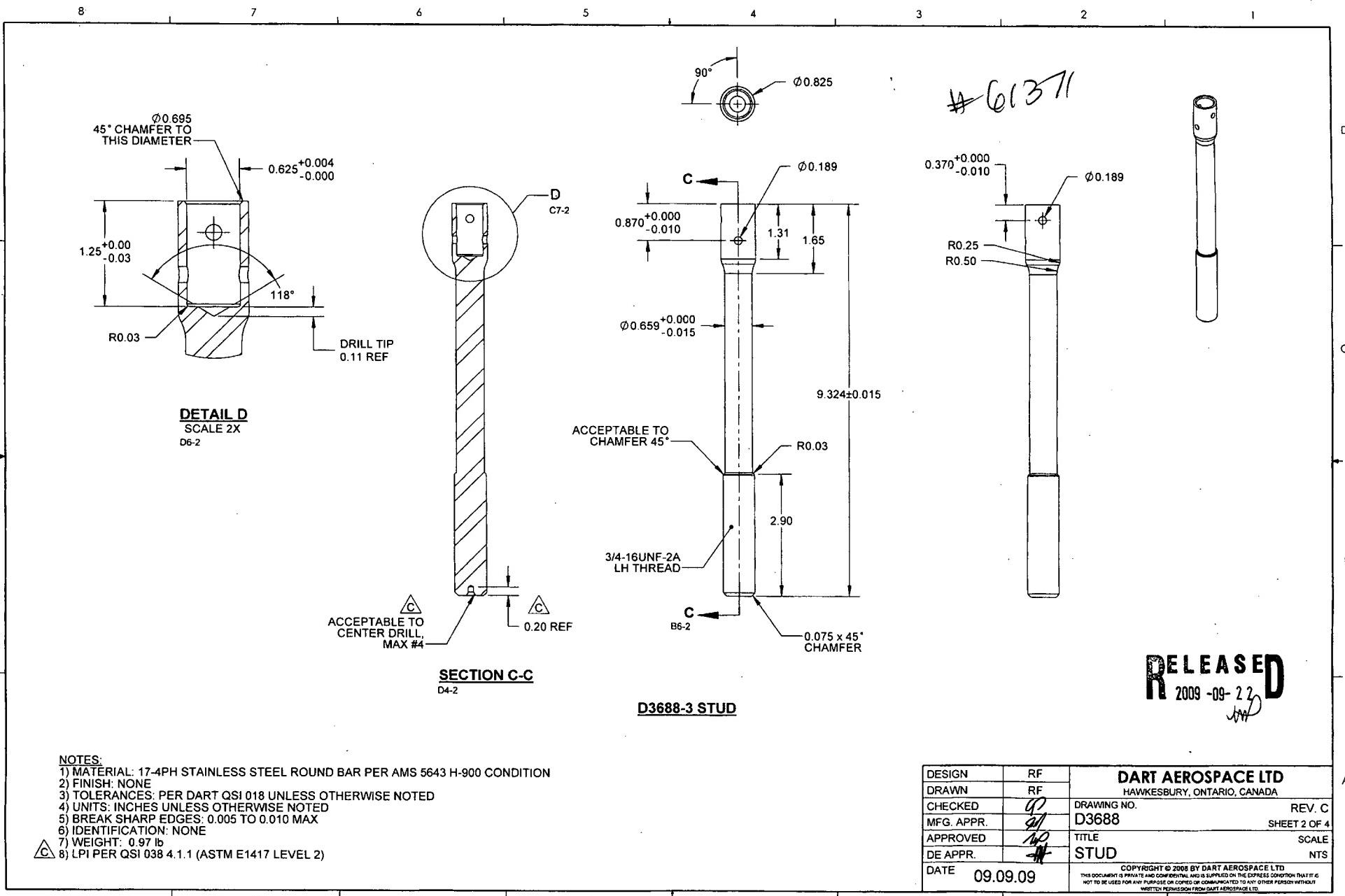
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LIQUID PENETRANT TEST REPORT

P- 15188 :

CLIENT	DART AEROSPACE		DATE	F/SEPT 2 2010	
ATTENTION	LINDA / CHANTEL		ACUREN JOB NO.	188-10-0832	
ADDRESS	1270 ABERDEEN STREET HAWKESBURY ON. K6H 1K7		PO/WO NO.	HAWKESBURY PLANT	
PROJECT	F. P. I.		WORK LOCATION	ASTM 1417 REV./DATE 2007	
ITEM(S) EXAMINED	4 Pcs. + 5 MACHINED STUDS		ACCEPTANCE STD.		

JOB DESCRIPTION	PROCEDURE NO. LT0002 REV./DATE	TECHNIQUE NO. LT-T442 REV./DATE, 2008
PART NO.	MATERIAL ALUMINUM THICKNESS VARIOUS	
SCOPE	WET FLUORESCENT LIQUID - STAINLESS STEEL PENETRANT INSPECTION CARRIED OUT 100% EXTERNAL	

METHOD	<input checked="" type="checkbox"/> FLUORESCENT	<input type="checkbox"/> VISIBLE	<input checked="" type="checkbox"/> WATER WASH	<input type="checkbox"/> SOLVENT REMOVABLE	<input type="checkbox"/> POST EMULSIFIED
FAMILY BRAND	MASNAFLUX		BLACK LIGHT S/N 16459	OUTPUT > 1000 μW/cm ²	AMBIENT < 2 fc
PENETRANT	2L67	MINIMUM DWELL TIME 95%	MIN.	LIGHTING EQUIP. <input type="checkbox"/> FLASHLIGHT <input type="checkbox"/> TROUBLELIGHT	<input type="checkbox"/> OUTPUT > 100 fc @ SURFACE
PENETRANT REMOVER	1120	MINIMUM DRY TIME 10	MIN.	OTHER LAB, NO	
DEVELOPER	WD 52	MINIMUM DWELL TIME 10	MIN.	LIGHT METER S/N 1098866	CAL DUE DATE OCT-19
DEVELOPER TYPE	<input checked="" type="checkbox"/> NON AQUEOUS	<input type="checkbox"/> AQUEOUS	<input type="checkbox"/> DRY		2010

TEST SURFACE					
SURFACE CONDITION	<input type="checkbox"/> AS GROUND	<input type="checkbox"/> AS WELDED	<input type="checkbox"/> MACHINED	<input type="checkbox"/> SHOT BLASTED	<input type="checkbox"/> CLEAN BARE METAL
SURFACE TEMPERATURE	< -4°C/ 20°F		> 10°C/50°F TO 52°C/125°F		> 52°C/125°F

RESULTS- <input type="checkbox"/> METRIC <input type="checkbox"/> IMPERIAL	
1 - CROSSTUBE-W.O. 61294 ✓ 1 - CROSSTUBE-W.O. 61295 ✓ 1 - CROSSTUBE-W.O. 61296 ✓ 1 - CROSSTUBE-W.O. 61287 ✓ 5 - STUDS - W.O. 61371 ✓	
8 10/09/09	

Scope of Services
 The agreement of Acuren Group Inc. to perform services extends only to those services provided for in writing. Under no circumstances shall such services extend beyond the performance of the requested services. It is expressly understood that all descriptions, comments and expressions of opinion reflect the opinions or observations of Acuren Group Inc. based on information and assumptions supplied by the owner/operator and are not intended nor can they be construed as representations or warranties. Acuren Group Inc. is not assuming any responsibilities of the owner/operator and the owner/operator retains complete responsibility for the engineering, manufacture, repair and use decisions as a result of the data or other information provided by Acuren Group Inc. In no event shall Acuren Group Inc.'s liability in respect of the services referred to herein exceed the amount paid for such services.

Standard of Care
 In performing the services provided, Acuren Group Inc. uses the degree, care and skill ordinarily exercised under similar circumstances by others performing such services in the same or similar locality. No other warranty, expressed or implied, is made or intended by Acuren Group Inc.

SIGNATURES			
CLIENT REPRESENTATIVE	Matt Morozotti <small>PRINT</small>	Matt Morozotti <small>SIGNATURE</small>	DTR # E27427
TECHNICIAN (SIGNATURE):			REPORT REVIEWED BY:
NAME (PRINT):	1 ST TECHNICIAN Mike Johnston <small>PRINT</small>	2 ND TECHNICIAN <small>CGSB REG. NO.</small>	NAME <small>INITIALS</small>
CGSB LEVEL	SNT LEVEL	CGSB LEVEL	SNT LEVEL
CGSB REG. NO.		CGSB REG. NO.	

WHITE – CLIENT COPY

CANARY – OFFICE COPY

PINK – TECHNICIAN COPY

GOLD – OFFICE COPY